

### **ADDITIONAL JITC VMF INITIATIVES**

As a member of the Digitally Aided Close Air Support (DACAS) Engineering Change Implementation Group (ECIG), JITC is researching, developing, and implementing new VMF-related initiatives.

#### **JITC Points of Contact:**

##### **VMF Testing POC**

DSN 879-5139  
(520) 538-5139

##### **Tactical Data Link Branch**

DSN 879-5139  
(520) 538-5139



#### **Joint Interoperability Test Command**

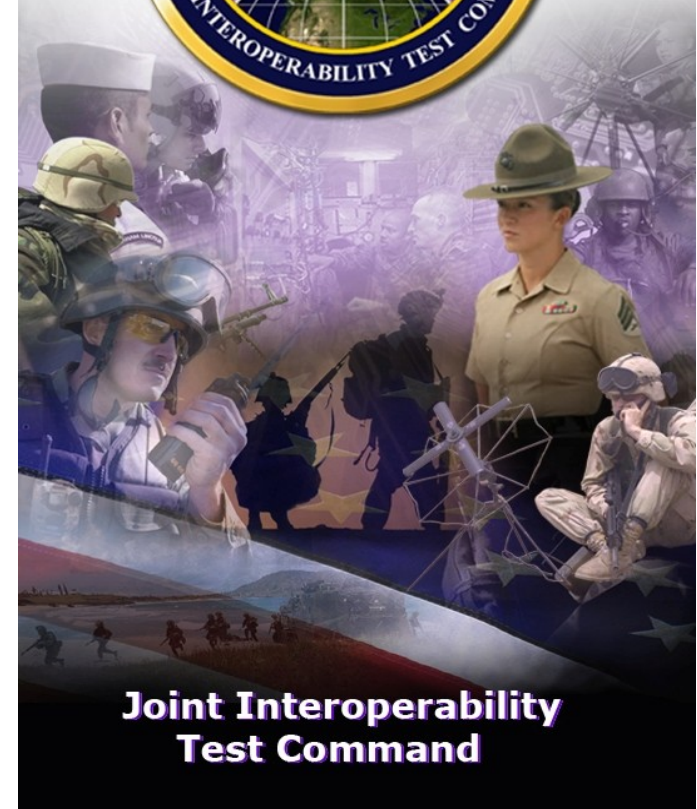
Attn: Visitor Support Center  
P.O. BOX 12798  
Fort Huachuca, AZ 85670-2798

Phone: 1-800-538-5482  
<http://jitc.fhu.disa.mil>

**Experts in Testing and Certification  
Accelerating the Nation's IT Dominance**



## **VARIABLE MESSAGE FORMAT (VMF) TEST CERTIFICATION PROGRAM**



**Joint Interoperability  
Test Command**

## **GENERAL INFORMATION**

The Variable Message Format (VMF) is a member of the joint family of Tactical Data Link (TDL) message standards, which includes Link 16, Link 22, and the Integrated Broadcast Service (IBS) Common Message Format (CMF). VMF messages provide means of exchanging digital data, for example, between combat units at various organizational levels, with varying needs for volume of information, and applicable to a broad range of tactical communications systems.

In Accordance With (IAW) Joint Chiefs of Staff Instruction (CJCSI) 6212.01F, Net Ready Key Performance Parameter (NR KPP), and Joint Interoperability Test Plan 3006, the JITC certifies tests for the Department of Defense (DoD) Chief Information Officer's (CIO) interoperability and supportability certifications of DoD Information Technology and National Security Systems (IT & NSS) that exchange and use information for units/forces to operate effectively in Joint, Coalition, and interagency operations.

JITC's joint interoperability test certification process for VMF capable systems includes four basic steps:

1. Identify and evaluate joint interoperability requirements of VMF-capable systems
2. Develop Certification Approach (Planning) consistent with Net-Centric Key Performance Parameter (NR-KPP)
3. Perform Evaluations, including but not limited to:
  - Joint Interoperability Risk Reduction Exercises (RREs)
  - Interoperability Tests/Assessments
  - Standards' Conformance Tests or Assessments
    - MIL-STD-6017,
    - MIL-STD-2045-47001
    - Other
4. Report Certification and Statuses
  - Joint Interoperability Test or Assessment Memorandum
  - Standards Conformance Test Certification Memorandum

The diverse nature of DoD IT & NSS, each with a wide range of capabilities, presents many challenges for today's warfighter. To keep up with the demand for interoperability from a VMF-dependent capabilities' perspective, JITC strives for standard testing tool sets and procedures (e.g., JITC's VMF Master

Message Sets and Test Procedures) while striving for compliance with DoD inter-network performance and data migration, e.g. NR-KPP; Joint Tactical Data Enterprise Services Migration Plan (JTMP).

JITC uses the following tools for evaluating system's correct implementation of VMF message processing standards:

### **Common Message Processor (CMP)**

The JITC uses the CMP to validate VMF messages created and processed by VMF-capable systems. The JITC certified CMP's (version 5.0.0.0) latest test for conformance to MIL-STD-6017 and MIL-STD-6017A.

### **Variable Message Format Test Tool (VTT)**

The VTT is a database driven tool, developed by the United States Army (USA) Communications-Electronics Command (CECOM) Software Engineering Center (SEC). The JITC uses the VTT to transmit VMF military-standard compliant messages to and receive from VMF-capable systems using TCP/IP or UDP. The JITC certified VTT's (version 8.1) latest test for conformance to MIL-STD-6017 and MIL-STD-6017A.

## **STEPS REQUIRED FOR CERTIFICATION**

The following are the steps a Program Office should take in preparation for joint interoperability certification (refer to our web site <http://jitic.fhu.disa.mil/ciidocs.htm> for all policy documents pertaining to joint interoperability testing and certification) :

***1. Contact your Service Participating Test Unit Coordinator (PTUC) (listed below) or your JITC Lead System POC (if one exists) for inclusion and coordination of VMF Test Certification activities in your program.***

***2. Contact the appropriate JITC System Point of Contact (POC) (see next page) to coordinate certification testing requirements, e.g., plan and budget IAW CJCSI 6212.01F. Project Managers (PMs) should accomplish this early in their development to ensure certification is accomplished well in advance of milestone decision dates.***

***3. Include Joint Testing and Certification requirements in the following Joint Capabilities Integration and Development System (JCIDS) documents: Capability Development Documents (CDDs), Capability Production Documents (CPDs), Information Support Plans (ISPs), Tailored Information Support Plans (TISPs), and Test and Evaluation Master Plans (TEMPS).***

***4. Provide VMF bit-level (Data Field Identifier / Data Use Identifier and Data Item) message implementations and system descriptions to JITC to support the development of test plans and procedures.***

## **SERVICE VMF PTUCs**

*US Army 410-417-0271 (DSN 867-0271)*

*US Navy 619-553-8045 (DSN 553)*

*US Marine Corps 760-725-2165 (DSN 365)*

*US Air Force 757-225-3567 (DSN 575)*

## **INTEROPERABILITY TEST SUPPORT**

The JITC provides test analysis and recommendations to the PM's Test and Evaluation Integrated Product Team. In addition, most S/As have test beds that provide the full range of VMF testing capabilities required for standards conformance and interoperability certification. The JITC can issue certifications based on JITC evaluation of S/A's testing providing that their test results and report documentation support the certification decision.